



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,425	06/25/2001	Stephane H. Maes	YOR9-1999-01	1143

22150 7590 05/09/2005

F. CHAU & ASSOCIATES, LLC  
130 WOODBURY ROAD  
WOODBURY, NY 11797

EXAMINER
----------

SKED, MATTHEW J

ART UNIT	PAPER NUMBER
----------	--------------

2655

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/806,425	<b>Applicant(s)</b> MAES ET AL.	
	<b>Examiner</b> Matthew J Sked	<b>Art Unit</b> 2655	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 is/are allowed.
- 6) ☒ Claim(s) 1-11, 13, 14, 16-20 and 22-24 is/are rejected.
- 7) ☒ Claim(s) 15 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/30/01, 2/14/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

### ***Claim Objections***

2. Claims 6 and 13 is objected to because of the following informalities:

In claim 6, the limitation should be changed from "implement and "broadcast and listen" methodology" to --implement a "broadcast and listen" methodology--.

In claim 13, line 13 should be changed from "service one of locally..." to --service of at least one of locally...--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 11, 13, 14, 16, 18-20, 22 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Tel (U.S. Pat. 5,943,648).

As per claim 1, Tel teaches a system for providing automatic and coordinated sharing of conversational resources, comprising:

a network comprising at least a first and second network device (transmitting subsystem and receiving subsystem, Fig. 1, elements 102 and 104);

the first and second network device each comprising:

a set of conversational resources (transmitting subsystem has a TTS converter and the receiving subsystem has a speech generator, Fig. 2, element 120 and Fig. 3, element 116);

a dialog manager for managing a conversation and executing calls requesting a conversational service (control applications output raw text in response to a user's request and sends and applies it to a speech generator with supplemental settings, col. 3, lines 48-52, 60-65, col. 6, lines 49-53 and Fig. 2 and 3, elements 114); and

a communication stack for communicating messages using conversational protocols over the network, wherein the messages communicated using the conversational protocols establish coordinated network communication between the dialog managers of the first and second device to automatically share the set of conversational resources of the first and second network device, when necessary, to perform their respective requested conversational service (communications interface is responsible for interfacing the transmitting and receiving subsystems to the network to transmit the speech parameters hence allowing the subsystems to share their conversational resources, the communication interface would inherently have a stack or

Art Unit: 2655

buffer in order to transmit the data, col. 3, line 67 to col. 4, line 6 and Fig. 1-3, elements 108A, 108B and 124).

5. As per claim 2, Tel teaches the set of conversational resources of the first is a TTS engine (Fig. 2, element 120) and the second is a natural language generator (formant synthesizer generates speech using voice settings hence giving natural sounding speech, col. 6, lines 26-29 and Fig. 1, element 156).

6. As per claim 3, Tel teaches the conversational protocols comprise coordination protocols that allow the dialog managers of the first and second device to exchange information comprising their respective conversational state (stop frame data), arguments and context (voice settings) and exchange dialog components (parameter stream consists of formant data, subset of words, voice settings, lip position data and stop frame data, col. 4, lines 17-52).

7. As per claim 4, Tel teaches the coordination protocols coordinate a peer-to-peer communication between the dialog managers of the first and second device (transmitting system and receiving system are connected directly through a network, Fig. 1).

8. As per claim 11, Tel teaches the conversational protocols comprise speech transmission protocols for transmitting compressed speech features (transmits compressed formant parameters, col. 4, lines 17-34).

9. As per claims 13 and 19, Tel teaches a method and program storage device for providing automatic and coordinated sharing of conversational resources between network devices, comprising the steps of:

receiving a request for a conversational service by a first network device (outputs and performs TTS based on a user's information request, col. 3, lines 60-65);

determining by the first network device to process the requested conversational service locally and remotely using both the local and remote conversational resources and automatically communicating with the at least second network device, if it is determined that the conversational service will be processed, at least in part, remotely using the conversational resources of the at least second network device (based upon the user's request the local device converts raw text to a parameter stream locally and transmits this stream to the remote device for synthesis, col. 3, line 60 to col. 4, line 6).

10. As per claims 14 and 20, Tel teaches transmitting messages using conversational protocols to establish coordinated network communication between the first and at least second network device for sharing the conversational resources (communications interface is responsible for interfacing the transmitting and receiving subsystems to the network to transmit the speech parameters hence allowing the subsystems to share their conversational resources, col. 3, line 67 to col. 4, line 6 and Fig. 1-3, elements 108A, 108B and 124).

11. As per claims 16 and 22, Tel teaches determining if the at least second network device is pre-designated by the first network device to process the conversational service (transmitting device only sends data to the receiving device hence this device must inherently be pre-designated, Fig. 1).

12. As per claims 18 and 24, Tel teaches

automatically establishing a network connection with the at least second network device by transmitting messages using the conversational protocols (connection is established by the communications interface that would inherently transmit the speech parameters using a protocol for speech, col. 3, line 67 to col. 4, line 6 and Fig. 1-3, elements 108A, 108B and 124); and

transmitting compressed speech features to the at least second network device (transmits compressed formant parameters, col. 4, lines 17-34).

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tel as applied to claim 1 above, and further in view of Baker et al. (U.S. Pat. 6,456,974).

As per claims 5-7, Tel does not teach the conversational protocols comprise discovery protocols that allow the first and second device to discover conversationally aware devices and applications on the network wherein the discovery protocol implements a "broadcast and listen" methodology to establish a dynamic and spontaneous network between at least the first and second network device.

Baker teaches a distributed speech recognition system where the conversational protocols comprise discovery protocols that allow the first and second device to

discover conversationally aware devices and applications on the network wherein the discovery protocol implements a "broadcast and listen" methodology to establish a dynamic and spontaneous network between at least the first and second network device (speech recognition server services multiple applications where the server listens for a "listening signal" from the client server that requests connection and in return sends a speech focus to the application, the connection established between the server and client would be dynamic because this connection did not exist previously to the "listening" signal, col. 3, lines 49-53, col. 7, lines 37-45 and Fig. 2).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Tel to discover conversationally aware devices and applications on the network and establishing dynamic and spontaneous networks between the first and second network devices as taught by Baker because this would only create connections between the server and applications that are currently communicating, hence preventing congestion in the network.

15. As per claim 8, Tel does not teach the conversational protocols comprise registration protocols for exchanging information regarding conversational resources, capabilities, and requirements.

Baker teaches the conversational protocols comprise registration protocols for exchanging information regarding conversational resources, capabilities, and requirements (API transmits grammar specifications and directives to the recognition engine for use in recognition hence defining the capabilities and requirements for the engine, col. 3, lines 14-22 and col. 4, lines 21-28).



It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Tel to exchange information regarding conversational resources, capabilities, and requirements as taught by Baker because this would ensure the proper data is transmitted between the two devices hence prohibiting error.

16. As per claim 9, Tel teaches the conversational protocols comprise negotiation protocols for exchanging information to establish a network configuration between the first and second network device based on their respective conversational resources and capabilities (the established network configuration would inherently be based on the respective conversational resources and capabilities in order for the formant and other data to be transmitted between the two devices, Fig. 1).

17. As per claim 10, Tel teaches the coordination protocols coordinate a peer-to-peer communication between the dialog managers of the first and second device (transmitting system and receiving system are connect directly through a network, Fig. 1) wherein the dialog managers of the first and second devices negotiate for control of the conversational resources (control program on transmitting device sends voice settings to be used in the synthesis and the control program on the receiving device can supplement or override these settings in synthesis hence negotiating for control over the synthesis, col. 6, lines 49-53).

18. Claims 17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tel.

Tel does not teach the determining is based on one of connection availability between and network traffic between the first network device and the at least second network device.

However, the Examiner takes Official Notice that that using connection availability as a determining factor in whether to transmit information is notoriously well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Tel to determine if to send the information based on connection availability because transmitting data when there is no connection would result in transmission failure hence this would prevent network errors.

***Allowable Subject Matter***

19. Claim 12 is allowed.

The following is a statement of reasons for the indication of allowable subject matter: Claim 12 teaches the combination of a system for providing automatic and coordinated sharing of conversational resources, comprising: a client, comprising a local conversational resource and a dialog manager, that processes a request for a conversational resource and **determines if a request for a conversational service can be performed using the local conversation resources**; and a server comprising server conversational resources, wherein the dialog manager of the client will automatically access the server for processing the request using the server conversational resources if the requested conversational service cannot be performed using the local conversational resources.

Tel teaches a speech signal distribution system that converts text into speech parameters for transmission to be synthesized at a remote site. Baker teaches a distributed speech recognition system that transmits grammar and other information along with the speech for recognition to a remote server. It would not have been obvious to one of ordinary skill in the art at the time of invention to modify the prior art on record to arrive at the applicant's invention.

20. Claims 15 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. White et al. (U.S. Pat. 6,408,272), filed after the current application, teaches a distributed speech recognition system that makes a decision whether to perform processing on the local or remote device. Hughes et al. (U.S. Pat. 6,282,268), by the same assignee, teaches a voice processing system with speech recognition capabilities on both the local and remote devices. Kimura et al. (U.S. Pat. 6,282,508) and Loring et al. (U.S. Pat. 6,195,641) teach retrieving vocabulary off a remote server for local recognition. Matsumoto (U.S. Pat. 6,0987,041), Kuhn et al. (U.S. Pat. 6,119,087), Bijl et al. (U.S. Pat. 6,173,259), and Jacobs et al. (U.S. Pat. 5,956,683) teach alternative speech distribution systems.

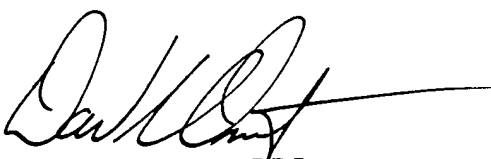
Art Unit: 2655

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J Sked whose telephone number is (571) 272-7627. The examiner can normally be reached on Mon-Fri (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MS  
4/28/05



DAVID L. OMETZ  
PRIMARY EXAMINER